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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte SACHIKO NISHIURA

Appeal 2009-003092 Application 09/454,755 Technology Center 2600

Decided: August 28, 2009

Before ROBERT E. NAPPI, JOHN A. JEFFERY, and CARLA M. KRIVAK, *Administrative Patent Judges*.

JEFFERY, Administrative Patent Judge.

DECISION ON APPEAL

On May 29, 2008, we remanded the present application on appeal to the Examiner under 37 C.F.R. § 41.50 to give the Examiner the (1) opportunity to respond to a newly-raised argument in the Reply Brief pertaining to generating new objects from a semi-transparent source object, and (2) more fully develop the record in connection with this issue. *See* Remand mailed May 29, 2008, at 1-3 ("Remand").

In response, the Examiner mailed a Supplemental Examiner's Answer explaining the Examiner's position regarding the object generation issue. *See* Supp. Ans. mailed June 9, 2008, at 2 ("Supp. Ans."). Appellant likewise responded to the Examiner's Supplemental Answer. *See* Reply to Supp. Ans. filed Aug. 5, 2008 ("Supp. Reply").

Based on these responses in connection with our remand, the record before us now provides sufficient basis to decide the present appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1, 2, 4-11, 13-20, and 22-30. We have jurisdiction under 35 U.S.C. § 6(b). We reverse.

STATEMENT OF THE CASE

Appellant invented a system for converting an object display document that generates a set of new objects from a set of source objects, where the new objects are less than the set of source objects. A display image is then obtained that is equivalent to that obtained from the source objects. Claim 1 is illustrative with the key disputed limitation emphasized:

 An apparatus for converting an original set of source objects by reducing the number of objects required to display a description document, said apparatus comprising a generating means for generating a set of new objects, from said original set of source objects in the document, a number of new objects in said set of new objects being fewer than a number of

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¹ See generally Abstract; Spec. 4.

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objects in said original set of source objects, said fewer objects obtaining a display image equivalent to the display of an image obtained from said original set of source objects,

wherein said generating means generates said new objects from a semi-transparent source object and other source objects located at a layer lower than a layer including said semi-transparent source object and spatially overlapping said semi-transparent source object,

wherein said generating means generates a new merged object including at least a first source object having an area and a second source object having an area and superimposed on said first source object.

The Examiner relies on the following as evidence of unpatentability:

Cannon	US 5,559,950	Sept. 24, 1996
Capps	US 5,583,542	Dec. 10, 1996
Vyncke	US 5,926,185	July 20, 1999

- The Examiner rejected claims 1, 2, 6-11, 15-18, and 28-30 under 35 U.S.C. § 102(e) as anticipated by Vyncke. Ans. 3-9.
- The Examiner rejected claims 19, 20, and 24-27 under 35 U.S.C. § 103(a) as unpatentable over Vyncke. Ans. 9-10.
- The Examiner rejected claims 4, 13, and 22 under 35 U.S.C. § 103(a) as unpatentable over Vyncke and Cannon. Ans. 10-12.
- The Examiner rejected claims 5, 14, and 23 under 35 U.S.C. § 103(a) as unpatentable over Vyncke and Capps. Ans. 12-13.

Rather than repeat the arguments of Appellant or the Examiner, we refer to the Briefs and the Answer² for their respective details. In this decision, we have considered only those arguments actually made by Appellant. Arguments which Appellant could have made but did not make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

THE ANTICIPATION REJECTION

Regarding independent claim 1, the Examiner finds that Vyncke discloses all of the claimed subject matter. Ans. 3-5. According to the Examiner, Vyncke's technique shown in Figure 8a pertains to objects, and the reference teaches merging two objects together to create a single object in column 5, lines 25-27. Supp. Ans. 2. As such, the Examiner reasons, Vyncke generates new objects from a semi-transparent source object and other source objects located at a layer lower than a layer including the semi-transparent source object and spatially overlapping the semi-transparent source object as claimed.

Appellant argues that Vyncke does not disclose a semi-transparent object (App. Br. 14-16), and that Vyncke's Figure 8a merely pertains to deleting hidden objects and does not generate new objects as claimed (Reply

² Throughout this opinion, we refer to (1) the Appeal Brief filed May 5, 2006; (2) the Examiner's Answer mailed April 18, 2007; (3) the Reply Brief filed August 7, 2006; (4) the Supplemental Examiner's Answer mailed June 9, 2008; and (5) the Reply to the Supplemental Examiner's Answer filed August 5, 2008.

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Br. 4).³ In any event, Appellant contends that the Examiner's reliance on the cited passage in column 5 of Vyncke pertains to a different embodiment than that shown in Figure 8a. As such, Appellant argues, the Examiner impermissibly "combined information from two distinct and incompatible embodiments of Vyncke" to arrive at the claimed invention. Supp. Reply 4.

The issue before us, then, is as follows:

ISSUE

Under § 102, has Appellant shown that the Examiner erred in rejecting claim 1 by finding that Vyncke generates new objects from:

- (1) a semi-transparent source object, and
- (2) other source objects located at a layer lower than a layer including the semi-transparent source object and spatially overlapping the semi-transparent source object as claimed?

³ Despite Appellant's assertion in the Reply to the Supplemental Answer that the object generation issue was argued in the opening brief, see Supp. Reply 4 ("As argued in Appellant's opening brief on appeal, Vyncke does not disclose combining a semi-transparent object with another object in a lower layer to form another object.") (emphasis added), Appellant's arguments in the opening brief were limited to the contention that Vyncke does not disclose a semi-transparent (i.e., a translucent) object (see App. Br. 14-16), and were silent regarding the object generation issue. Remand, at 2. Nevertheless, we address Appellant's arguments in the Appeal Brief as well as those in the Reply Brief and Supplemental Reply in this opinion.

FINDINGS OF FACT

The record supports the following findings of fact (FF) by a preponderance of the evidence:

- 1. Vyncke discloses a method for processing page description language (PDL) commands representing graphical objects that (1) translates the PDL commands into a structured object display list; (2) identifies the occurrence of certain undesirable graphical object properties (e.g., completely hidden objects, double contours, useless clips, etc.); (3) modifies the display list to correct or eliminate the undesirable properties; and (4) modifies the corresponding PDL commands accordingly. Vyncke, Abstract; col. 1, ll. 5-10; col. 2, l. 55 col. 3, l. 9; col. 4, ll. 1-12; Fig. 1.
- 2. Figure 8b shows a procedure for identifying and eliminating masked or hidden objects. This method determines (1) all masking objects A, and (2) all objects B linked to A. If the bounding box of A completely covers that of B, B is removed from the list. Vyncke, col. 3, ll. 38-39; col. 8, ll. 42-58; Fig. 8b.
- "Such opaque or masking objects have a fill attribute that fully masks the background without any translucency or transparency." Vyncke, col. 8, II. 44-46.
 - 4. In connection with this embodiment, Vyncke notes the following: Figure 8a shows an example of a rectangle 206 which completely covers a square 208 and partly covers a circle 210. Although the circle completely covers a triangle 212, the circle is not opaque (solid), so the triangle is not actually hidden but shows through. A hexagon 214 is contained within the bounds of the rectangle, but is on top of the rectangle and is not hidden.

Vyncke, col. 8, ll. 35-41; Fig. 8a.

These graphical objects in Vyncke's Figure 8a are reproduced below.

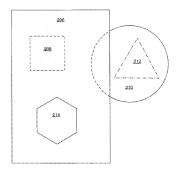


Fig. 8a

Reproduction of Vyncke's Figure 8a Showing Graphical Objects

- 5. The procedure applied to the image shown in Figure 8a will delete only the square 208. Vyncke, col. 8, ll. 56-57.
- Vyncke notes that "any object that is completely hidden by an opaque, or solid, object may also be deleted." Vyncke, col. 7, ll. 57-59.
- Vyncke's discussion of Figures 8a and 8b is underneath the heading "Useless Clips, Gross Clipping and Hidden Objects." See generally col. 7, 1, 46 – col. 8, 1, 58.
- 8. Figure 3 shows a procedure for removing double contours. This method examines pairs of objects A and B to determine whether (1) one object is in front of the other with identical control points (i.e., the same number of control points in exactly the same locations); (2) the top object is

a stroke and not a fill; and (3) the back object is not a stroke. If these three conditions are satisfied, the two objects are recombined into one object. Vyncke, col. 3, ll. 24-25; col. 5, ll. 20-44; Fig. 3.

9. Vyncke's discussion of Figure 3 is underneath the heading "Remove Double Contours." *See generally* col. 5, Il. 20-44.

PRINCIPLES OF LAW

Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. *RCA Corp. v. Appl. Dig. Data Sys., Inc.*, 730 F.2d 1440, 1444 (Fed. Cir. 1984); *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1554 (Fed. Cir. 1983).

To anticipate under § 102, the prior art reference "must not only disclose all elements within the four corners of the document, but must also disclose those elements 'arranged as in the claim.'" *Net MoneyIn, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008) (citation and internal quotation marks omitted).

"Thus, it is not enough that the prior art reference discloses part of the claimed invention, which an ordinary artisan might supplement to make the whole, or that it includes multiple, distinct teachings that the artisan might somehow combine to achieve the claimed invention." *Id.* at 1371. *See also In re Arkley*, 455 F.2d 586, 587 (CCPA 1972) ("[T]he [prior art] reference must clearly and unequivocally disclose the claimed [invention] or direct

those skilled in the art to the [invention] without *any* need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference.").

Although Webster's Third Int'l Dictionary (1993) lists the terms "transparent" and "translucent" as synonyms, "[t]he definition also sets forth an express distinction between transparent and translucent: transparent stresses complete absence of obstruction to vision and translucent applies to that which permits passage of light but bars clear and complete vision.

... The distinction between these synonyms cannot be ignored." *Terlep v. Brinkmann Corp.*, 418 F.3d 1379, 1384 (Fed. Cir. 2005) (internal quotation marks omitted).

ANALYSIS

We begin by construing a key disputed limitation of claim 1 which calls for, in pertinent part, a *semi-transparent* source object. Appellant equates the term "semi-transparent" with "translucent" and distinguishes the term from "transparent." App. Br. 14-16. For the reasons below, we have no reason to quarrel with this construction, and agree that a "semi-transparent" object is one that is translucent given the distinction between "transparent" and "translucent" objects.

As Appellant correctly indicates (App. Br. 15), the Federal Circuit has addressed the distinction between "transparent" and "translucent." Specifically, the court found that "*transparent* stresses complete absence of obstruction to vision"[,] and "*translucent* applies to that which permits passage of light but bars clear and complete vision." *Terlep*, 418 F.3d at 1384.

Based on this distinction, a "semi-transparent" object most reasonably comports with one that is translucent—not transparent. The prefix "semi-" "signif[ies] half, and sometimes partly or imperfectly; as, semiannual, half yearly; semitransparent, imperfectly transparent." Since a semi-transparent object would be one that is "partly" or "imperfectly" transparent under this definition, it therefore most reasonably comports with a translucent object, namely one that permits passage of light, but bars clear and complete vision.

With this construction, we turn to Vyncke. Notably, Vyncke indicates that *opaque or masking objects* in connection with Figure 8b "have a fill attribute that fully masks the background *without any translucency or transparency.*" FF 3 (emphasis added). That is, an opaque object is not translucent or transparent.

Regarding Figure 8a—an exemplary layout of objects intended to illustrate removing hidden objects using the procedure of Figure 8b (see FF 2-7)—Vyncke further notes that "the circle is not opaque (solid), so the triangle is not actually hidden but shows through." FF 4 (emphasis added). Since Vyncke indicates that an opaque object is not translucent or transparent, an object that is not opaque (e.g., the circle 210 in Figure 8a) would therefore be translucent or transparent by negative implication. Compare FF 3 with FF 4. The Examiner's point in this regard (Ans. 14) is well taken. Therefore, the circle 210 in Figure 8a is a translucent or "semi-transparent" object. See FF 4.

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⁴ Webster's Revised Unabridged Dictionary, 1913, available at http://machaut.uchicago.edu/?resource=Webster%27s&word=semi&use1913=on&use1828=on.

But we do not agree with the Examiner regarding the object generation limitation of claim 1. The Examiner's reliance on the passage in column 5 and Figure 3 of Vyncke pertains to a completely different embodiment (removing double contours) than the embodiment of Figures 8a and 8b (removing hidden objects). *Compare* FF 2-7 with FF 8-9. That Vyncke discusses these different embodiments under different headings in the reference (FF 7 and 9) only bolsters this conclusion.

It is well settled that a prior art reference "must not only disclose all elements within the four corners of the document, but must also disclose those elements *arranged as in the claim.*" *Net MoneyIn*, 545 F.3d at 1369 (emphasis added). As such, it is not enough that the prior art reference "includes multiple, distinct teachings that the artisan might somehow combine to achieve the claimed invention." *Id.* at 1371.

That is the case here. In short, the Examiner has simply selected and combined diverse teachings from distinct embodiments in Vyncke to arrive at the object generation limitation of claim 1. *See* Supp. Ans. 2. Notably, the Examiner has not shown—nor can we find—anything in Vyncke indicating that the double contour removal technique of Figure 3 would necessarily be used with the hidden object removal technique of Figures 8a and 8b. Absent this showing, we cannot sustain the Examiner's anticipation rejection. *See Arkley*, 455 F.2d at 587.

Furthermore, the Examiner fails to show that *any* objects in Vyncke's Figure 8a satisfy the three unique conditions required for removing double contours (FF 8), let alone that one of these objects is a semi-transparent source object as claimed. Although (1) the circle 210 in Figure 8a is a semi-transparent object as we noted previously, and (2) the triangle 212 is

seemingly located in a layer below the circle since it shows through the circle (see FF 4), there is simply nothing in Vyncke indicating that these two objects would be subject to double contours so as to merge these two objects into a single object. Objects that qualify for that technique must meet three specific conditions including, among other things, having identical control points (FF 8). That the circle and the triangle in Figure 8a are different shapes and sizes (FF 4) only further suggests that they do not meet these criteria.

For the foregoing reasons, Appellant has persuaded us of error in the Examiner's rejection of independent claim 1. Therefore, we will not sustain the Examiner's anticipation rejection of that claim, and independent claims 10 and 28-30 which recite commensurate limitations. We will also reverse the Examiner's rejection of dependent claims 2, 6-9, 11, and 15-18 for similar reasons

THE OBVIOUSNESS REJECTIONS

We will also not sustain the Examiner's obviousness rejections for similar reasons. Moreover, we find that the cited secondary references to Cannon and Capps do not cure the deficiencies noted above with respect to the independent claims. Accordingly, we will not sustain the obviousness rejections of (1) claims 19, 20, and 24-27; (2) claims 4, 13, and 22; and (3) claims 5, 14, and 23 for similar reasons.

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CONCLUSIONS

Appellant has shown that the Examiner erred in rejecting (1) claims 1, 2, 6-11, 15-18, and 28-30 under § 102, and (2) claims 4, 5, 13, 14, 19, 20, and 22-27 under § 103.

ORDER

The Examiner's decision rejecting claims 1, 2, 4-11, 13-20, and 22-30 is reversed.

REVERSED

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